

HEALTHY WORKPLACES SUMMIT 2022 - Healthy Workplaces Lighten the Load

PREVENTION OF MUSCULOSKELETAL DISORDERS AND PSYCHOSOCIAL RISKS IN THE WORKPLACE: EU STRATEGIES AND FUTURE CHALLENGES

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INTRODUCTION - MULTIFACTORIAL AETIOLOGY OF WORK-RELATED MSDs

Work-related disorders were defined as multifactorial diseases among a working population that are the result of a number of different factors and which can be caused and/or aggravated, partially and not exclusively, by work and occupational exposures (WHO, 1985).

Determinants of work-related MSDs:

A combination of individual, physical, psychological, social and work-related aspects



Ergonomic discomfort



Further occupational and non-occupational factors:

- several demographic and individual characteristics
- health conditions and comorbidities;
- risk factors linked to unhealthy behaviours and lifestyles
- psychosocial risks;
- digitalisation and the use of new technologies in the workplace

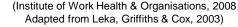




INTRODUCTION: PSYCHOSOCIAL RISKS AS DETERMINANTS OF MSDS

- Psychosocial risks: those aspects of the work design, organisation and management, and the relative social context that may have a potential negative impact on psychological, physical and social health and well-being (Cox & Griffiths, 2005; ILO, 1986).
- Psychosocial and organisational factors, such as high workload/demands, low social support, low job control, low job satisfaction and monotonous work, raise the risk of MSDs, especially when combined with physical risks.
- The rapid progress of technological innovation, demographic changes and modifications in the labour market, especially new forms of work and new ways of performing jobs are bringing the exacerbation of some existing psychosocial risks and the emergence of new ones

PSYCHOSOCIAL HAZARDS							
Job content	Lack of variety or short work cycles, fragmented or meaningless work, under use of skills, high uncertainty, continuous						
Workload & work pace	exposure to people through work Work overload or under load, machine pacing, high levels of time pressure, continually subject to deadlines						
Work schedule	Shift working, night shifts, inflexible work schedules, unpredictable hours, long or unsociable hours						
Control	Low participation in decision making, lack of control over workload, pacing, shift working, etc.						
Environment & equipment	Inadequate equipment availability, suitability or maintenance; poor environmental conditions such as lack of space, poor lighting, excessive noise						
Organisational culture & function	Poor communication, low levels of support for problem solving and personal development, lack of definition of, or agreement on, organisational objectives						
Interpersonal relationships at work	Social or physical isolation, poor relationships with superiors, interpersonal conflict, lack of social support						
Role in organisation	Role ambiguity, role conflict, and responsibility for people						
Career development	Career stagnation and uncertainty, under promotion or over promotion, poor pay, job insecurity, low social value to work						
Home-work interface	Conflicting demands of work and home, low support at home, dual career problems						





PREVALENCE OF MSDs IN EUROPE

Highest **percentage** of workers suffering from one or more **MSDs in the past 12 months**:

- Finland 79%, France 75% and Denmark 73%; Italy 58%.
- Most frequent in construction, water supply, and agriculture, forestry and fishing, human health and social work activities (EU-OSHA, 2019)
- MSDs are slightly higher for female workers (60%);
- The workers over 55 years reported more often (67%) one or more MSDs than workers under 25 years (45%);
- The workers with only pre-primary or primary education are more likely to report MSDs.

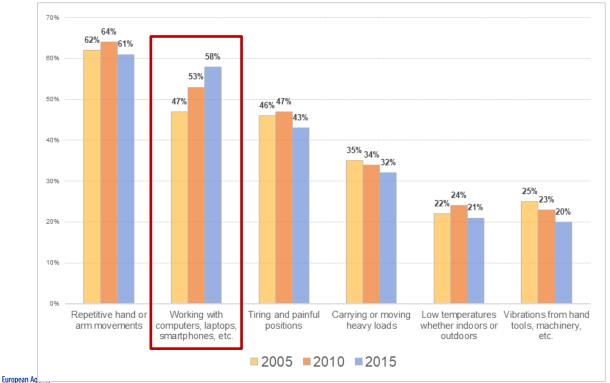


Source: EU-OSHA (2019)

PREVALENCE OF MSDs IN EUROPE

for Safety and Health

Percentage of workers reporting that they are exposed to different physical risk factors at their work at least a quarter of the time, EU-25 in 2005, EU-28 in 2010 and 2015



Source: EU-OSHA (2019) based on the fourth (2005), fifth (2010) and sixth (2015) waves of the EWCS.

Total reports of occupational diseases in Italy compared with those relating to the musculoskeletal system in the last 5 years

	2016	2017	2018	2019	2020
Diseases of the musculoskeletal system and connective tissue	38,681	37,608	39,001	40,887	30,355
	(64.23%)	(64.85%)	(65.59%)	(66.81%)	(67.52%)
Other reported occupational diseases	21,537	20,387	20,460	20,314	14,600
	(35.77%)	(35.15%)	(34.41%)	(33.19)%	(32.84%)
Total	60,218	57,995	59,461	61,201	44,955

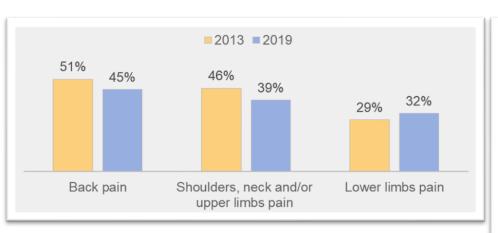
Adapted from INAIL, 2021

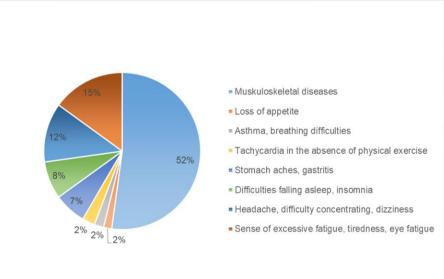






Musculoskeletal pains suffered by workers in the 6 months before the survey





Di Tecco et al. 2022- EU OSHA Discussion paper Elaboration on Insula 2013 and 2019 datasets (INAIL, 2014, 2021b)







Correlations between musculoskeletal pains suffered by workers in the 6 months prior to the survey and some psychosocial risks and self-reported lack of well-being

	Effort Reward Imbalance	Control	Harassme nt and Violence	Support	Job insecurity	Mental Health
Back pain	.149**	028*	.085**	054**	004	.189**
Shoulders, neck and/or upper limb pain	.135**	023*	.073**	065**	.002	.173**
Lower limb pain	.110**	048**	.061**	069**	017	.185**

^{*} p-value > .05

Di Tecco et al. 2022- EU OSHA Discussion paper Elaboration on Insula 2013 and 2019 datasets (INAIL, 2014, 2021b)

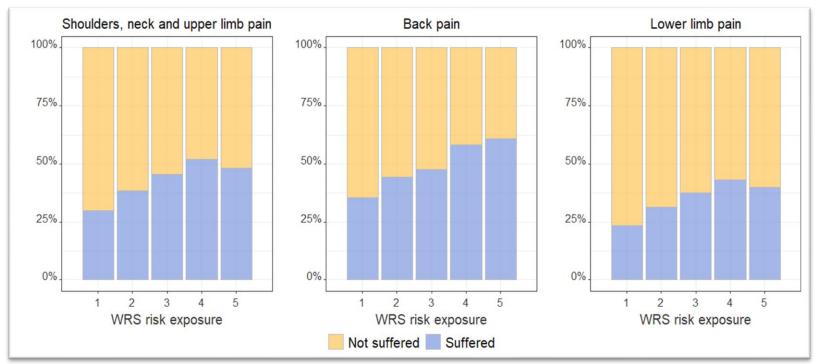




^{**} p- value > .00



Self-reported health disorders and work-related stress risk exposure



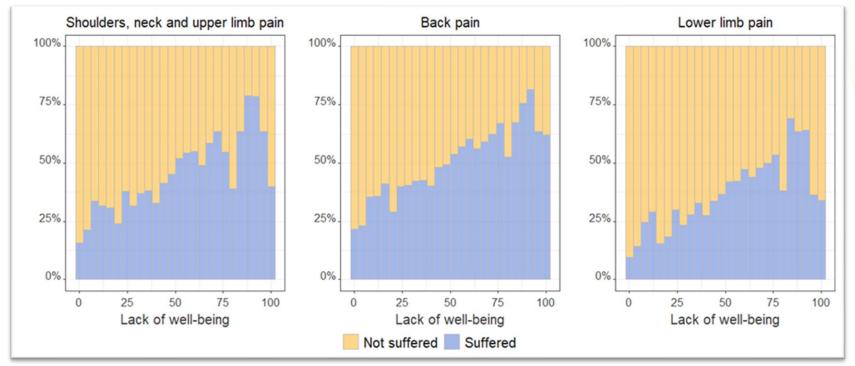


Di Tecco et al. 2022- EU OSHA Discussion paper Elaboration on Insula 2013 and 2019 datasets (INAIL, 2014, 2021b)

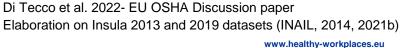




Self-reported health disorders and lack of well-being









Hard and soft policies and their impact on MSDs' prevention

- Framework Directive 89/391/EEC on occupational safety and health
- Directive 89/655/EEC then amended by Directive 2009/6/EC concerning the minimum safety and health requirements for the use of work equipment
- Directive 89/656/EEC on minimum safety and health requirements for the use of personal protective equipment
- Directive 90/269/EEC on the minimum health and safety requirements for the manual handling of loads
- Directive 90/270/EEC on the minimum safety and health requirements for work with display screen equipment.
- Relevant legislative update by EU Commission reviewing of the workplace Directive 89/654/EEC and the display screen equipment Directive 90/270/EEC
- European strategies for health and safety at work 2014-2020 and 2021-2027
- EU-OSHA 2020-2022 campaign 'Healthy Workplaces Lighten the Load'





TOWARDS AN INTEGRATED APPROACH TO MANAGE AND PREVENT MSDS









European Agency Safety and Health











Conclusions

- Work-related MSDs still represent a significant global health problem
- The multifactorial aetiology of work-related MSDs has been recognised over time, and the use of multi-casual models has flourished in the field of occupational health prevention.
- Psychosocial and organisational factors raise the risk of MSDs, especially when combined with physical risks.
- The future of work is bringing several opportunities but challenges as well in occupational health and safety as the exacerbation of some existing psychosocial risks and the emergence of new ones.
- The management of MSDs has been going towards a renewed focus on improving musculoskeletal health prevention in the workplace using multifactorial models
- The main challenge in preventing work-related MSDs is advancing a multidisciplinary approach to health policy and strategy at European and national system levels towards integrated models to assess and manage all the potential determinants of MSDs.





MANY THANKS FOR YOUR ATTENTION!





DISCUSSION PAPER



PREVENTION OF MUSCULOSKELETAL DISORDERS AND PSYCHOSOCIAL RISKS IN THE WORKPLACE: EU STRATEGIES AND FUTURE CHALLENGES

Introduction

This discussion paper was developed as part of the collaboration agreement signed by the Italian National Institute for Insurance against Accidents at Work (INAIL) and the European Agency for Safety and Health at Work (EU-OSHA) related to the provision of research services in the area of musculoskeletal disorder (MSD) prevention.

MSDs represent a significant global health problem affecting around 17.1 billion people globally (GBD 2019 Diseases and Injuries Collaborators, 2020). These disorders affect the bocomoter appears involving muscles, nerves, tendons, the skeleton, joints, cartillage, spinal discs and the localization of the control of the problem of the control of the

In 1985, the World Health Organisation (WHO) defined work-related disorders as multifactorial diseases among a working population that are the result of a number of different factors and which can be caused and/or aggressed, partially and not exclusively, by work and occupational exposures. Beach on the definition, the multifactorial actiogogy dww.re-tealed MSDs has been recognised over time, and the use of multi-casual models has fourthed in the field of occupational health prevention. A combination of individual, physicial, psychological, social and work-related MSDs. Work-related MSDs work-related MSDs work-related MSDs work-related supports are a major work-related disports in most physicially demanding jobs since these are triggered generally by biomechanical overstrains and ergonomic discomfort. The most common recognised professional risk factors involve filling and carrying havey jobsts, brokenged awkward posture, repetitive movement, intensive efforts, pulling and pushing heavy loads, twisted or mpetitive strain, protonoord account of a vibration of the protonoord discomfort and intensive hybridge affection or prestring extraints.

Further occupational and non-occupational factors are recognised as playing a role in the onset, course and/or worsening of work-leated MSDs (Cole & Rivillis 2004; National Research Council & Institute of Medicine, 2001; Roquelaure, 2018):

- several demographic and individual characteristics (e.g. gender, age, migrant status, ethnicity, genetics, socioeconomic situation);
- health conditions and comorbidities;
 risk factors linked to unhealthy behaviours and lifestyles (such as overweight, physical inactivity, sedentary lifestyle):
- psychosocial risks;
- digitalisation and the use of new technologies in the workplace.

Psychosocial risks have assumed increasing relevance in the study of determinants of MSDs over time (Bongers et al., 1993). These risks are defined as those aspects of the work design, organisation

Safety and health at work is everyone's concern. It's good for you. It's good for business.

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